STATE BUILDING CODE INTERPRETATION NO. I-10-06

May 6, 2006

The following is offered in response to your request for a formal interpretation of the provisions of Section 1504.5 of the 2003 International Building Code (IBC) portion of the 2005 State Building Code which deals with requirements for edge securement for low-slope roofs.

Question: Given that Section 1504.5 of the referenced code requires metal edge securement (except gutters) for low-slope roofs to be designed in accordance with ANSI/SPRI ES-1, do custom fabricated sheet metal drip edges and copings designed by an architect or structural engineer and made in the roofing contractor's shop or in the field satisfy the requirements of the code? This scenario assumes that the design has not been tested and that the contractor or fabricator is not certified or listed to produce the edge securement.

Answer: No. The design of an ANSI/SPRI ES-1 compliant edge securement system requires testing as part of the design. Several sections of the ES-1 standard include a requirement for physically testing the designed assembly to insure its integrity under high wind conditions. Without including testing of the entire assembly in the design phase it is impossible to comply with the referenced standard. Approval of a low-slope edge securement system entails two important components: 1. The assembly was designed and tested in accordance with the standard; and 2. The fabricator of the edge securement system has been certified to produce the system in accordance with the requirements of the design as tested.

The 2006 IBC, which has yet to be adopted by Connecticut, clarifies this issue in its revised wording of Section 1504.5 (in part): ...metal edge securement, except gutters, shall be designed and installed for wind loads in accordance with Chapter 16 and tested for resistance in accordance with ANSI/SPRI ES-1...